

1 JAN 04 Median Crossover Guidelines Overview

As adopted 10 Dec 03 via Debbie Barbour, PE, Director of Preconstruction

Types of Crossovers

- All- (Full) Movement Crossover (AMCO)=all turns and crossings allowed
- Directional Crossover (DIRCO)=a leftover; left-turns allowed in one direction only; use when spacing requirements are not met for **AMCO**
- Median U-Turn Crossover (MUTCO)=U-turns permitted only; no through
- Special Use Crossover=for fire protection, ambulance services, etc. considered on an individual basis after a traffic engineering investigation

General Guidelines

(Requirements applied to all crossovers)

- **Adequate spacing alone does not warrant any new crossover**
- NCDOT must deem crossover and type necessary for generated traffic
- Requesting party responsible for submitting justification, otherwise NCDOT can not review
- **Adequate left-turn deceleration lane and taper must be possible without impeding storage requirements of adjacent intersections**
- U-turns must be adequately accommodated or restricted for trucks and large vehicles expected to use
- Vertical and horizontal intersection sight distance must be met/maintained
- Grade of crossover must not exceed **5 percent**
- Median width must be **16 feet** or more; 23 feet or more desired
- Avoid crossovers that require a signal or have potential for a signal
- **NCDOT has right to close or modify any crossover it deems unsafe**

Full Control of Access and Interstates

- **PUBLIC-USE CROSSOVERS DISALLOWED**
- Only **MUTCO** allowed for "authorized vehicles" when engineering study determines a need
- Should be at least **½ mile** from any overhead structure
- Should be at least **1 mile** from terminus of ramp accel./decel. lane

- Should be at least **3 miles** apart between interchanges
- Should be signed appropriately
- Must not install on urban freeways
- Must not install where high ADT causes unacceptable gaps for U-turns

Divided Highways w/o Full Control Access with Speeds GREATER THAN 45mph

- **AMCO** must be **2000 feet apart** or more
- Crossover spacing *critical*
- If spacing not met, **DIRCO** considered

Divided Highways w/o Full Control Access with Speeds of 45mph OR LESS

- **AMCO** must be **1200 feet apart** or more
- If spacing not met, **DIRCO** considered
- **DIRCO** generally preferred where it meets operation and access needs

Crossovers on Active Roadway Projects

(TIP projects in design or construction phase)

- **Roadway Proj. Engr. and Proj. Design Engr. responsible for locating** and will determine crossover type and if justified
- **Division Office** must be consulted
- **Traffic Engr. Branch (TEB) and Div. Office** review guideline deviations and offer recommendations; **State Design Engr.** responsible for any guideline exceptions; negotiated crossovers must be reviewed and approved by all parties above and local officials if applicable
- Priority to existing intersecting streets
- Minimum spacings above adhered to

Crossovers on Existing Facilities

- **Traffic Engr. Branch** responsible for approval and investigation
- **Div. Engr.** must send written recommendations to **TEB**
- **TEB and Div. Office** review guideline deviations and offer recommendations; **State Traffic Engr.** responsible for any guideline exceptions-to notify **Div. Office**
- **If for private developments**, they must be responsible to construct/fund crossover (including drainage fac.) and provide exact location and justification or else NCDOT will not review or approve; **DIRCO** generally preferred